

**In The Claims:**

1. (currently amended) A method for ranking services in a web services architecture having a hierarchy of services (~~401, 406, 408, 410~~) with a root originating service requestor (~~401~~), a service of a first level in the hierarchy calling a service of a lower level, the method comprising:

~~the originating service requestor (401) indicating a preference regarding one or more services at least one service~~ and a ranking machine (~~405~~) having a choice algorithm based on the preference;

~~the originating service requestor (401) invoking services of one or more levels at least one level~~ of hierarchy;

~~at each level of the hierarchy, a service using a directory (411) to find~~ finding a set of possible lower-level services by a service using a directory at each level of the hierarchy; and

~~the ranking machine (405) applying the choice algorithm to the set of possible lower-level services.~~

2. (currently amended) A method as claimed in claim 1, wherein the lower-level services are selected from service requestors or service providers.

3. (currently amended) A method as claimed in claim 1 ~~or claim 2, wherein the set of possible lower level services is referred~~ further comprising referring the set of possible lower-level services to the ranking machine (~~405~~) from the directory (~~411~~) and returning a preferred sequence ~~is returned by the ranking machine (405) to the directory.~~

4. (currently amended) A method as claimed in claim 3, wherein ~~the step of referring to the ranking machine (405) the set of possible lower-level services to the ranking machine from the directory~~ is not visible to the service using the directory (~~411~~).

5. (currently amended) A method as claimed in claim 1 ~~or claim 2, wherein the set of possible lower-level services is sent further~~ comprising sending the set of possible lower-level services by the service using the directory (411) to the ranking machine (405) and returning a preferred sequence ~~is returned by the ranking machine (405) to the service.~~
6. (currently amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, ~~wherein further comprising returning a single result or a sequence of results is returned to the service using the directory (411).~~
7. (currently amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, wherein lower-level invocations of services in the hierarchy are not visible to higher-level services.
8. (currently amended) A method as claimed ~~any one of the preceding claims~~ in claim 1, wherein the preference ~~of the originating service requestor (401) ranks~~ comprises at least one of ranking services in an order in which the originating service requestor (401) wishes to use the services, excludes excluding services from being used, and/or provides providing other selection influencing criteria.
9. (currently amended) A method as claimed in ~~any one of the preceding claims~~ in claim 1, wherein the preference ~~of the originating service requestor (401) is based on quality of service criteria including~~ comprising at least one cost, efficiency, speed and reliability.
10. (currently amended) A method as claimed in ~~any one of the preceding claims~~ in claim 1, wherein ~~where there is an originating service requestor's preference,~~ the preference overrides a selection by the service using the directory (411).

11. (currently amended) A method as claimed in ~~any one of the preceding claims~~claim 1, wherein if the preferred service is not available, a subsequent service is obtained by reference to the ~~originating service requestor's~~original preference.

12. (currently amended) A method as claimed in ~~any one of claims 1 to 9~~claim 1, wherein if there is no stored ~~originating service requestor's~~ preference, the service using the directory ~~(411)~~ makes the selection.

13. (currently amended) A web services architecture comprising:  
a root originating service requestor ~~(401)~~;  
a hierarchy of services ~~(401, 406, 408, 410)~~ in which a service of a first level calls a service of a lower level;  
a directory ~~(411)~~ for finding services in the hierarchy;  
a ranking machine ~~(405)~~ ~~with means for applying~~ configured to apply a choice algorithm for services based on the originating service requestor's preference regarding one or more services;  
wherein, at each level of the hierarchy, the directory ~~(411)~~ provides a set of possible services and the ranking machine ~~(405)~~ applies the choice algorithm to provide a sequence of preferred services.

14. (currently amended) A web services architecture as claimed in claim 13, wherein the lower-level services are selected from at least service requestors ~~or~~ and service providers.

15. (currently amended) A web services architecture as claimed in claim 13 ~~or claim 14~~, wherein the ranking machine ~~(405)~~ is connected to the directory ~~(411)~~ by a port ~~(412)~~ and the set of possible services is referred to the ranking machine ~~(405)~~ by the directory ~~(411)~~ and the sequence of preferred services is returned to the directory ~~(411)~~ by the ranking machine ~~(405)~~.

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16. (currently amended) A web services architecture as claimed in ~~any one of claims~~ claims 13 to 15, wherein a service of a first level finds a service of a lower level by means of a UDDI directory ~~(411)~~.

17. (currently amended) A web services architecture as claimed in claim 16, wherein the ranker machine ~~(405)~~ has a port ~~(412)~~ on the UDDI directory ~~(411)~~ and processes flows turning TModel bags into a selected set of TModels.

18. (currently amended) A web services architecture as claimed in claim 16 ~~or claim 17~~, wherein each UDDI operation is referred to the ranking machine ~~(405)~~ and returned as a sequence conforming with the service requestor's preference.

19. A web services architecture as claimed in ~~any one of claims~~ claim 16 to 18, wherein underlying UDDI application code carries out the referral and appends the location of the ranker machine ~~(405)~~ to subsequent XML flow.

20. A computer program product for a web services architecture having a hierarchy of services ~~(401, 406, 408, 410)~~ with a root originating service requestor ~~(401)~~, a service of a first level calling a service of a lower level, the computer program product comprising:  
a computer readable medium having computer readable program code embodied therein,  
the computer readable program code comprising ~~computer readable program code means for performing the steps of:~~  
computer readable program code configured to ~~the originating service requestor~~ ~~(401) indicating~~ indicate a preference regarding ~~one or more services~~ at least one service and a ranking machine ~~(405)~~ having a choice algorithm based on the preference;  
computer readable program code configured to ~~the originating service requestor~~ ~~(401) invoking~~ invoke services of ~~one or more levels~~ at least one level of hierarchy;

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computer readable program code configured at each level of the hierarchy, a  
service using a directory (411) to find a set of possible lower-level services by a service using a  
directory at each level of the hierarchy; and

computer readable program code configured to the ranking machine (405)  
applying apply the choice algorithm to the set of possible lower-level services.